

Work Order ID 150736

Tuesday, August 30, 2016 4:14:55 PM

150736

Page 1

Item ID: D412-698-112

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bracket Aluminum Door RH

Start Date: 8/31/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/13/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: dmDate: 16/08/30

Tooling:

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI 9635	B								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D412-698-112 CHG002								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.01							
Quality Control									

DAS
6
9-89OCT 06 2016
OCT 13 2016DAS
21
9-89

16-10-13

DAS
28
9-89

NOV 24 2016

DAS
6
9-89

OCT 06 2016

DAS
27
9-89DAS
28
9-89

NOV 24 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 150736

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150736

Page 2

Item ID: D412-698-112

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bracket Aluminum Door RH

Start Date: 8/31/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/13/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-698-112 Location: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.02							
Quality Control									

DAS
27
9-89
NOV 24 2016

DAS
28
9-89

DAS
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9-89
NOV 24 2016

DAS
21
9-89
NOV 24 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 1

Work Order ID: 150736

150736

Parent Item: D412-698-112

D412-698-112

Parent Item Name: Bracket Aluminum Door RH

Start Date: 8/31/2016

Required Date: 9/13/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.11.29 NEW ISSUE DD VERF:JLM
13.01.22 ECN13-516 NOW @ CHG 002 DD VERF:JLM

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3199-4 *D3199-4* Bracket, Fwd RH		Manufactured	No				Each	17.0000	**	1 OCT 06 2016	6 9-89		DAS 27 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST022				17					
				77735				17					
D3121-141 *D3121-141* Bracket Assembly		Manufactured	No				Each	11.0000	**	3 OCT 08 2016 15065	6 9-89		DAS 27 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST018				11					
				146854				3					
				147922				8					
D3121-144 *D3121-144* Bracket Assembly		Manufactured	No				Each	3.0000	**	1 OCT 06 2016	6 9-89		DAS 27 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST018				3					
				143682				3					
D3199-1 *D3199-1* Bracket		Manufactured	No				Each	24.0000	**	8 150605	6 9-89		DAS 27 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST022				24					
				147312				24					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
					85
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					85

Picklist Print

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Page 2

Work Order ID: 150736

150736

Parent Item: D412-698-112

D412-698-112

Parent Item Name: Bracket Aluminum Door RH

Start Date: 8/31/2016

Required Date: 9/13/2016

Start Qty: 1.00

Required Qty: 1.00

D3202-1 Manufactured No

Each 20.0000

D3202-1

Cover

**

OCT 06 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST195a

20

143726

5

147812

15

D4737-041 Manufactured No

Each 2.0000

D4737-041

Bracket Assembly

**

OCT 06 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST122

2

129173

2

D4737-044 Manufactured No

Each 2.0000

D4737-044

Bracket Assembly

**

OCT 06 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST122

2

129183

2

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E & INSTRUCTIONS FOR
CONTINUED AIRWORTHINESS ICA-D412-698 REV. 5

REF. TCCA STC SH92-43

REF. FAA STC SR01446NY

REF. EASA STC EASA.IM.R.S.00709

1.0 PURPOSE

The purpose of this service instruction is to add the D412-698-111/-112 Cabin Door Roller kits for installation on aircraft equipped with cargo door assembly P/N's 205-031-669-15 (LH) and 205-031-669-16 (RH). Customers who have purchased the D412-698-011/-012 kits can upgrade to D412-698-111/-112 using the DSI 9635-011/-012 kits as follows:

- DSI 9635-011 Roller Bracket Change Kit, LH: converts a D412-698-011 to a D412-698-111;
- DSI 9635-012 Roller Bracket Change Kit, RH: converts a D412-698-012 to a D412-698-112.

2.0 PARTS LISTS

Qty -011	Qty -012	Part Number	Description
X		DSI 9635-011	ROLLER BRACKET CHANGE KIT, LH (TO CONVERT A D412-698-011 KIT)
	X	DSI 9635-012	ROLLER BRACKET CHANGE KIT, RH (TO CONVERT A D412-698-012 KIT)
1		D3199-3	FORWARD BRACKET, LH
	1	D3199-4	FORWARD BRACKET, RH
1	1	D4737-041	BRACKET ASSEMBLY
1		D4737-043	BRACKET ASSEMBLY
	1	D4737-044	BRACKET ASSEMBLY

Qty -111	Qty -112	Part Number	Description
X		D412-698-111	CABIN DOOR ROLLER KIT, LH
	X	D412-698-112	CABIN DOOR ROLLER KIT, RH
3	3	D3121-141	BRACKET ASSEMBLY
1		D3121-143	BRACKET ASSEMBLY
	1	D3121-144	BRACKET ASSEMBLY
8	8	D3199-1	BRACKET
1		D3199-3	FORWARD BRACKET, LH
	1	D3199-4	FORWARD BRACKET, RH
1	1	D3202-1	COVER
1	1	D4737-041	BRACKET ASSEMBLY
1		D4737-043	BRACKET ASSEMBLY
	1	D4737-044	BRACKET ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

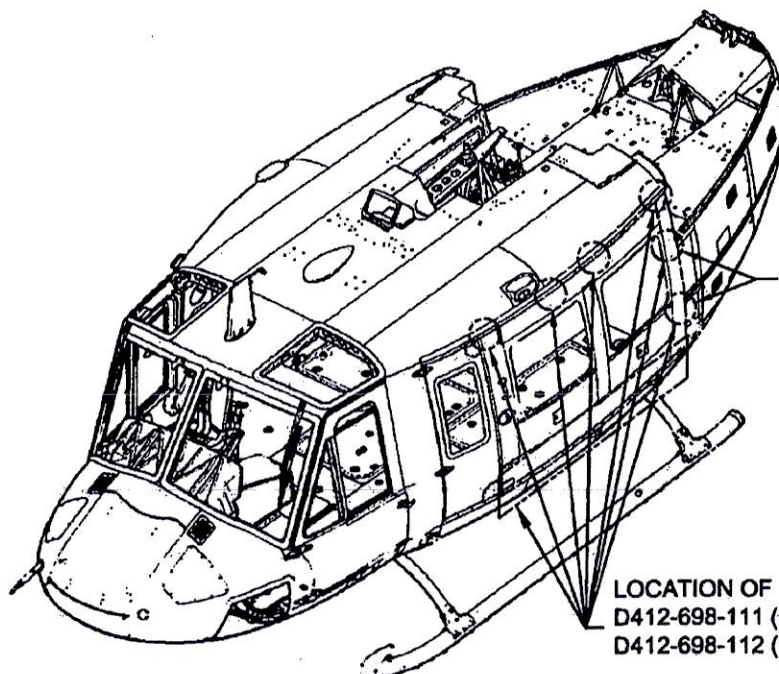
APPROVED

BY: *D. Shepherd*
D. SHEPHERD (DE # 02)

DATE: 13.01.11
CERT. NO.: SH92-43
ISSUE NO.: 5

B	ADD D3199-3/-4 TO KITS	MB	13.01.09
A	NEW ISSUE	MB	12.11.21
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. B
CHECKED		DSI 9635	SHEET 1 OF 5
MFG. APPR.	N/A	TITLE	SCALE
APPROVED		ROLLER BRACKET CHANGE KIT	NTS
DE APPR.		COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	13.01.09		

SHOP COPY
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 150736 MJS 16-08-30



LOCATION OF
DSI 9635-011 (SHOWN)
DSI 9635-012 (OPPOSITE)

LOCATION OF
D412-698-111 (SHOWN)
D412-698-112 (OPPOSITE)

FIGURE 1 – INSTALLATION OVERVIEW

3.0 INSTALLATION

- 3.1 Remove LH and/or RH sliding doors (ref P/N 205-031-669-15/-16) from the aircraft per the Aircraft Maintenance Manual.
- 3.2 Remove 205-031-436-001 and replace with D3121-141 Bracket (3 places). Reuse existing hardware and shims if determined to be airworthy. Alternatively, if using D412-698-021 Replacement Shim Kit, install D3238-1 & D3238-11 as required. Note that the D3121-141 brackets contain one additional middle slot not used for this installation (see Figure 6 of IIN-D412-698 or Figure 52-8 of ICA-D412-698).
- 3.3 Remove 205-031-435-001/002 and replace with D3121-143 Bracket for left hand doors and D3121-144 Bracket for right hand doors. Reuse existing mounting hardware and shims if determined to be airworthy. Alternatively, if using D412-698-021 Replacement Shim Kit, install D3238-3 & D3238-13 as required. Note that the D3121-143/-144 brackets contain one additional middle slot not used for this installation (see Figure 6 of IIN-D412-698 or Figure 52-8 of ICA-D412-698).
- 3.4 Remove 205-031-433-1 Roller Support (LH) and 205-031-433-2 Roller Support (RH) and replace with D4737-043 on left hand doors and D4737-044 on right hand doors. Reuse existing mounting hardware and shims if determined to be airworthy. Alternatively, if using D412-698-021 Replacement Shim Kit, install D3238-5 & D3238-15 as required.

NOTE: The upper aft door track on early model aircraft may not have been modified to accept the extra roller on the D4737-043/-044 Brackets. If this track has not been modified, it should be modified in accordance with BHT TB 205-99-105 at this time.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY:

D. SHEPHERD (DE # 02)

DATE: 13.01.11

CERT. NO.: SH82-43

ISSUE NO.: 5

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	UP	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9635	SHEET 2 OF 5
APPROVED	AMP	TITLE	SCALE
DE APPR.		ROLLER BRACKET CHANGE KIT	NTS
DATE	13.01.09	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

- 3.5 Remove 205-031-434-1 Roller Support and replace with D4737-041. Reuse existing mounting hardware and shims if determined to be airworthy. Alternatively, if using D412-698-021 Replacement Shim Kit, install D3238-5 & D3238-15 as required.
- 3.6 Remove 205-032-669-125 Track (LH) and/or 205-032-669-126 Track (RH) as applicable. Install D3199-1/-3/-4 Brackets and D3202-1 Cover as shown in Figure 2 using existing mounting hardware if determined to be airworthy.
- 3.7 Re-install LH and/or RH doors on the aircraft per the Aircraft Maintenance Manual. Check sliding operation of door. Adjust position/shimming of all new brackets until door operation is smooth and free of dragging/binding through full travel of the door. Once the door is sliding smoothly, torque all fasteners per Aircraft Maintenance Manual.
- NOTE:** To prevent roller wear and premature door track wear, ensure vertical rollers are sitting flush to door tracks.
- 3.8 **NOTE:** It is acceptable to install any portion of the D412-698-111/-112 kits in combination with the existing Bell door components. Replacement parts may be ordered individually as follows:

Bell Part Number	Location	Dart Replacement Part Number	Applicable Instruction
205-031-436-001	STA 162 in STA 140 in STA 116 in	D3121-141	3.2
205-031-435-001	STA 96 in	D3121-143	3.3
205-031-435-002	STA 96 in	D3121-144	3.3
205-031-433-1	STA 168 in	D4737-043	3.4
205-031-433-2	STA 168 in	D4737-044	3.4
205-031-434-1	STA 168 in	D4737-041	3.5

4.0 WEIGHT AND BALANCE

INSTALLATION	WEIGHT	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D412-698-111 Cabin Door	0.98 lb	-48.0 in	-47.0 in lb	130 in	127.4 in lb
Roller Kits (net)	0.44 kg	-1.22 m	-0.54 m kg	3.30 m	1.45 m kg
D412-698-112 Cabin Door	0.98 lb	48.0 in	47.0 in lb	130 in	127.4 in lb
Roller Kits (net)	0.44 kg	1.22 m	0.54 m kg	3.30 m	1.45 m kg
Both D412-698-111/-112 Installed (net)	1.96 lb 0.88 kg	0 in 0 m	0 in lb 0 m kg	130 in 3.30 m	254.8 in lb 2.90 m kg
Replace 205-031-433-1 with D4737-043 (net)	0.19 lb 0.09 kg	-48.0 in -1.22 m	-9.1 in lb -0.11 m kg	168 in 4.27 m	31.9 in lb 0.38 m kg
Replace 205-031-433-2 with D4737-044 (net)	0.19 lb 0.09 kg	48.0 in 1.22 m	9.1 in lb 0.11 m kg	168 in 4.27 m	31.9 in lb 0.38 m kg
Replace 205-031-434-1 with D4737-041 (net)	0.12 lb 0.05 kg	+/-48.0 in +/-1.22 m	+/-5.8 in lb +/-0.06 m kg	168 in 4.27 m	20.2 in lb 0.21 m kg

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)
DATE: 13.01.11
CERT. NO.: SH92-43
ISSUE NO.: 5

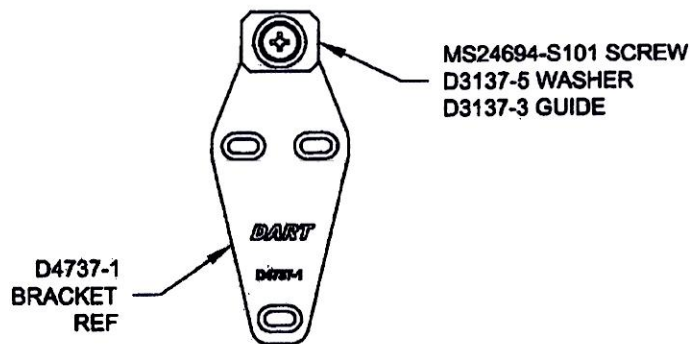
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>	DRAWING NO.	REV. B
CHECKED	<i>[Signature]</i>	DSI 9635	SHEET 3 OF 5
MFG. APPR.	N/A	TITLE	SCALE
APPROVED	<i>[Signature]</i>	ROLLER BRACKET CHANGE KIT	NTS
DE APPR.	<i>[Signature]</i>	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	13.01.09		

5.0 MAINTENANCE

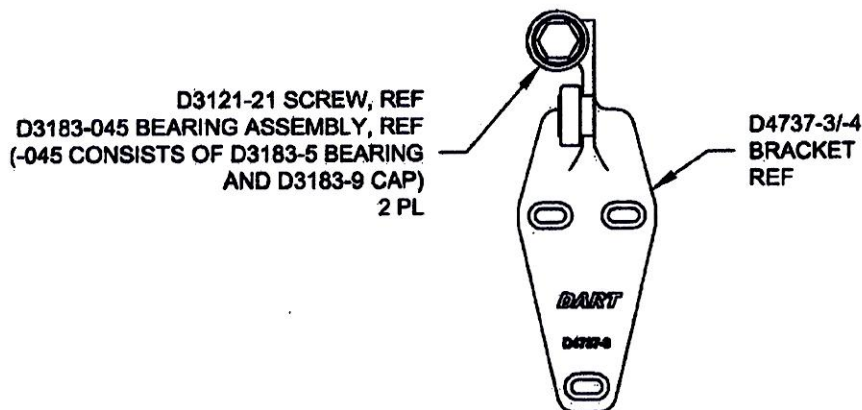
Maintain D412-698-111/-112 in accordance with ICA-D412-698 for the D412-698-011/-012 Kits.

6.0 D4737-041/-043/-044 REPLACEMENT PARTS

For D3121-141/-143/-144 Bracket Assemblies, see Section 5.0 of IIN-D412-698 (Section 52.14 of ICA-D412-698).



D4737-041 BRACKET ASSEMBLY



D4737-043/-044 BRACKET ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 13.01.11
CERT. NO.: SH92-43
ISSUE NO.: 5

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9635	SHEET 5 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ROLLER BRACKET CHANGE KIT	NTS
DATE	13.01.09	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E & INSTRUCTIONS FOR
CONTINUED AIRWORTHINESS ICA-D412-698 REV. 5

REF. TCCA STC SH92-43

REF. FAA STC SR01446NY

REF. EASA STC EASA.IM.R.S.00709

1.0 PURPOSE

The purpose of this service instruction is to add the D412-698-111/-112 Cabin Door Roller kits for installation on aircraft equipped with cargo door assembly P/N's 205-031-669-15 (LH) and 205-031-669-16 (RH). Customers who have purchased the D412-698-011/-012 kits can upgrade to D412-698-111/-112 using the DSI 9635-011/-012 kits as follows:

- DSI 9635-011 Roller Bracket Change Kit, LH: converts a D412-698-011 to a D412-698-111;
- DSI 9635-012 Roller Bracket Change Kit, RH: converts a D412-698-012 to a D412-698-112.

2.0 PARTS LISTS

Qty -011	Qty -012	Part Number	Description
X		DSI 9635-011	ROLLER BRACKET CHANGE KIT, LH (TO CONVERT A D412-698-011 KIT)
	X	DSI 9635-012	ROLLER BRACKET CHANGE KIT, RH (TO CONVERT A D412-698-012 KIT)
1		D3199-3	FORWARD BRACKET, LH
	1	D3199-4	FORWARD BRACKET, RH
1	1	D4737-041	BRACKET ASSEMBLY
1		D4737-043	BRACKET ASSEMBLY
	1	D4737-044	BRACKET ASSEMBLY

Qty -111	Qty -112	Part Number	Description
X		D412-698-111	CABIN DOOR ROLLER KIT, LH
	X	D412-698-112	CABIN DOOR ROLLER KIT, RH
3	3	D3121-141	BRACKET ASSEMBLY
1		D3121-143	BRACKET ASSEMBLY
	1	D3121-144	BRACKET ASSEMBLY
8	8	D3199-1	BRACKET
1		D3199-3	FORWARD BRACKET, LH
	1	D3199-4	FORWARD BRACKET, RH
1	1	D3202-1	COVER
1	1	D4737-041	BRACKET ASSEMBLY
1		D4737-043	BRACKET ASSEMBLY
	1	D4737-044	BRACKET ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 13.01.11
CERT. NO.: SH92-43
ISSUE NO.: 5

B	ADD D3199-3/-4 TO KITS	MB	13.01.09
A	NEW ISSUE	MB	12.11.21
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9635	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		ROLLER BRACKET CHANGE KIT	NTS
DATE	13.01.09	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
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